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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,555

03/04/2005

Masaki Aoki

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EXAMINER

KOSLOW, CAROL M

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

01/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/526,555

Applicant(s)

AOKI ET AL.

Examiner

C. Melissa Koslow

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-10 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/05, 2/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

The Japanese references cited in the information disclosure statement of 4 March 2005 have been considered with respect to the provided English abstracts.

Claims 2-6, 8, 9, 11-15, 17 and 18 are objected to because of the following informalities: The formulas should be rewritten using subscripts and superscripts. Appropriate correction is required.

Claims 1, 7, 10 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims teach the layer is formed of the main material alone, but then teaches the main material has a coating or an oxide added thereto. The presence of the oxide and coating means the layer does not containing the main material alone. This discrepancy needs to be corrected since it makes the claimed indefinite.

Claims 4 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are indefinite since the variables x and y are not defined.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 10, 13 and 15 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4-9 of U.S. Patent No. 7,288,889. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented process produces the phosphor claimed in this application.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-9 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by the translation for JP 11-86735.

This reference teaches $\text{Zn}_2\text{SiO}_4\text{:Mn}^{2+}$ phosphor particles coated with MgO, ZnO or Al_2O_3 and plasma display units, which have the claimed structure, containing these particles. Since the coated particles are same as that claimed, the taught particles must have a degree of charge suppression in the claimed range, absent any showing to the contrary. The reference teaches the claimed unit and phosphor.

Claims 10, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 5,744,233 or 5,985,175.

These references teach $\text{Y}_2\text{O}_3:\text{Eu}^{+3}$ phosphors coated with B_2O_3 , or a mixture of silica and TiO_2 or B_2O_3 . Since the coated particles are same as that claimed, the taught particles must have a degree of charge suppression in the claimed range, absent any showing to the contrary. The references teach the claimed phosphor.

Claims 10 and 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 5,289,081.

This reference teaches $\text{Y}_2\text{O}_3:\text{Eu}^{+3}$ phosphors coated with SiO_2 and $\text{Zn}_2\text{SiO}_4:\text{Mn}^{2+}$ phosphor particles coated with MgO , ZnO or Al_2O_3 . Since the coated particles are same as that claimed, the taught particles must have a degree of charge suppression in the claimed range, absent any showing to the contrary. The reference teaches the claimed phosphor.

Claims 7-9 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by the WO 03/056596.

U.S. patent 7,232,530 is the national stage application for WO 03/056596 and thus it is the translation for WO 03/056596.

This reference teaches $\text{Zn}_2\text{SiO}_4:\text{Mn}^{2+}$ phosphor particles coated with MgO , ZnO or Al_2O_3 . These particles are used in plasma display units, which have the claimed structure. Since the taught particles are same as that claimed, the taught particles must have a degree of charge suppression in the claimed range, absent any showing to the contrary. The reference teaches the claimed unit and phosphor.

Claims 1, 4, 6, 10, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 03/025090 or WO 03/025088.

Claims 1, 4, 6, 10, 13 and 15 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. patent application publication 2004/0051440 or 2004/0043692.

U.S. patent application publication 2004/0051440 is the national stage application for WO 03/025090 and thus is the translation for WO 03/025090.

U.S. patent application publication 2004/0043692 is the national stage application for WO 03/025088 and thus is the translation for WO 03/025088.

These references teach $\text{MMgAl}_{10}\text{O}_{17}:\text{xEu}^{2+}$, where M is $\text{Ba}_{1-\text{x}}$ or $\text{Ba}_{1-\text{x-y}}\text{Sr}_\text{y}$, x is 0.03-0.2 and y is 0.1-0.5 coated with SiO_2 . These particles are used in plasma display units, which have the claimed structure. Since the taught particles are same as that claimed, the taught particles must have a degree of charge suppression in the claimed range, absent any showing to the contrary. The reference teaches the claimed unit and phosphor.

Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by the translation for JP 2000-285809.

This reference teaches a plasma display unit having the claimed structure and comprising a phosphor layer composed of $\text{Y}_2\text{O}_3:\text{Eu}^{+3}$ or $(\text{Y,Gd})\text{BO}_3:\text{Eu}^{+3}$ and having an oxide having a negative surface charge, such as silica, V_2O_5 , MoO_3 , Ta_2O_5 , TiO_2 , Nb_2O_5 , SnO_2 , GeO_2 or B_2O_3 added therein. It also teaches Since the taught particles are same as that claimed, the taught particles must have a degree of charge suppression in the claimed range, absent any showing to the contrary. The reference teaches the claimed unit.

Claims 2, 3, 11 and 12 would be allowable if rewritten to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

There is no teaching or suggestion in the cited art of record of the unit and phosphors of these claims.

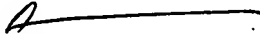
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cmk
January 25, 2008


C. Melissa Koslow
Primary Examiner
Art Unit 1793